AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-9 (Canceled)

10. (**Currently Amended**): An energy storage device comprising:

n, (where n is an integer ≥ 3), storage elements arranged in a series network; ~~, said network able to provide a continuous voltage across its terminals,~~ and

n(n-1)/2 identical charge transfer modules, each module electrically connected to and pairing two storage elements of the n storage elements;

wherein each module is configured to provide~~of the said network and ensuring~~ a bidirectional charge transfer ~~of charge~~ between ~~these~~ the two storage elements paired therewith;

wherein~~, and~~ each storage element ~~(C_k) being~~is electrically connected to (n-1) modules and is paired with each of the other n-1 storage elements ~~of the network by (n-1) associated modules~~.

11. (**Currently Amended**): An energy storage device as claimed in claim 10, wherein said modules are ~~of the~~of a three-pole or four-pole type depending on whether the storage elements ~~that they pair~~paired therewith are adjacent or nonadjacent.

12. (Withdrawn): An energy storage device comprising n storage elements arranged in a series network, in which $n=2^m$, said network able to provide a continuous voltage across its terminals, and n-1 charge transfer modules, each module pairing two storage elements of the said network and ensuring a bidirectional transfer of charge between these two storage elements of the said network, and in which $n=2^m$, wherein the said n-1 modules are of three-pole type, and are distributed as m-1 groups of rank 0

to m-1, such that to the group of rank i there corresponds 2^i modules, each associated with $n/2^i$ elements arranged as two assemblies so as to form a pair, the modules of the said group of rank $i \neq 0$ being dimensioned so as to have a gain in current 2^i times as large as the gain in current of the module of the group of rank 0.

13. (Withdrawn): An energy storage device comprising n storage elements arranged in a series network, in which $n=2^m-x$, said network able to provide a continuous voltage across its terminals, and l charge transfer modules, each module pairing two storage elements of the said network and ensuring a bidirectional transfer of charge between these two storage elements, and, wherein said l of modules are of three-pole type, with $n-1-x<l\leq n-1$ modules, and are distributed as m groups of rank 0 to m-1, such that to the group of rank i there corresponds at most 2^i modules, each associated with $n/2^i$ elements arranged as two assemblies so as to form a pair, the modules of the said group of rank $i \neq 0$ being dimensioned so as to have a gain in current 2^i times as large as the gain in current of the module of the group of rank 0.

14. (**Currently Amended**): An energy storage device as claimed in claim 10, wherein each storage element has a pair of terminals and the bidirectional charge transfer between a storage element and the n-1 storage elements ~~which are paired with~~paired therewith comprises ~~manifests itself by~~ a charging or discharging current ~~of these paired elements~~ proportional to a first order ~~to the~~of the difference between the voltage at the terminals of the ~~said~~ element and the average of the voltages at the terminals of the ~~said~~ storage elements paired there with.

15. (Withdrawn): An energy storage device as claimed in claim 12, wherein the charge transfer between a storage element and the storage elements which are paired with manifests itself by a charging or discharging current of these paired elements proportional to first order to the difference between the voltage at the terminals of the said element and the average of the voltages at the terminals of the said storage elements paired with.

16. (Withdrawn): An energy storage device as claimed in claim 13, wherein the charge transfer between a storage element and the storage elements which are paired with manifests itself by a charging or discharging current of these paired elements proportional to first order to the difference between the voltage at the terminals of the said element and the average of the voltages at the terminals of the said storage elements paired with.

17. (Previously Presented): The device as claimed in claim 10, wherein said storage elements are electrochemical battery cells, cells of lithium-ion battery type or supercapacitors.

18. (Withdrawn): The device as claimed in claim 12, wherein said storage elements are electrochemical battery cells, cells of lithium-ion battery type or supercapacitors.

19. (Withdrawn): The device as claimed in claim 13, wherein said storage elements are electrochemical battery cells, cells of lithium-ion battery type or supercapacitors.

20. (Previously Presented): An electronic system comprising a charger and an energy storage device as claimed in claim 10, said energy storage device being rechargeable by the said charger.

21. (Withdrawn): The device as claimed in claim 12, wherein said storage elements are electrochemical battery cells, cells of lithium-ion battery type or supercapacitors.

22. (Withdrawn): The device as claimed in claim 13, wherein said storage elements are electrochemical battery cells, cells of lithium-ion battery type or supercapacitors.